

from the anterior to the posterior end; anterior half is provided mid-dorsally with a spear shaped dark lined design. Dorsum provided with six pairs of sigillae arranged mid-longitudinally as in Fig. 1a. Ventral side is brownish black, with a pair of yellowish spots in the centre. Epigyne with a long and wrinkled scape bent at right angles to the body and a pair of basal lamellae as in Fig. 1b, c. Internal genitalia as in Fig. 1 d.

**Distribution:** All the nine districts of coastal

Andhra Pradesh and Gol Bagh, Lahore (now in Pakistan).

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### 31. CLADOCERA OF KEOLADEO NATIONAL PARK, BHARATPUR, IV. NEW RECORDS: *CAMPTOCERCUS* CF. *AUSTRALIS* SARS, 1896 AND *INDIALONA GLOBULOSA* (DADAY, 1898)

(With ten text-figures)

Hitherto, 36 genera containing about 88 species of Cladocera have been recorded from India (Michael and Sharma 1988, Venkataraman 1983, 1992). This may constitute only a part of the total number of species which actually occur in varied habitats in different parts of the subcontinent. The present note deals with two more of the Cladocera species recorded from Keoladeo National Park, Rajasthan. *Camptocercus* cf. *australis* Sars, 1896 is new to the Indian subcontinent while *Indialona globulosa* (Daday, 1898) is recorded for the first time in Rajasthan.

Family: CHYDORIDAE Stebbing, 1902

Subfamily: ALONINAE Frey, 1967

Genus: *Camptocercus* Baird, 1843

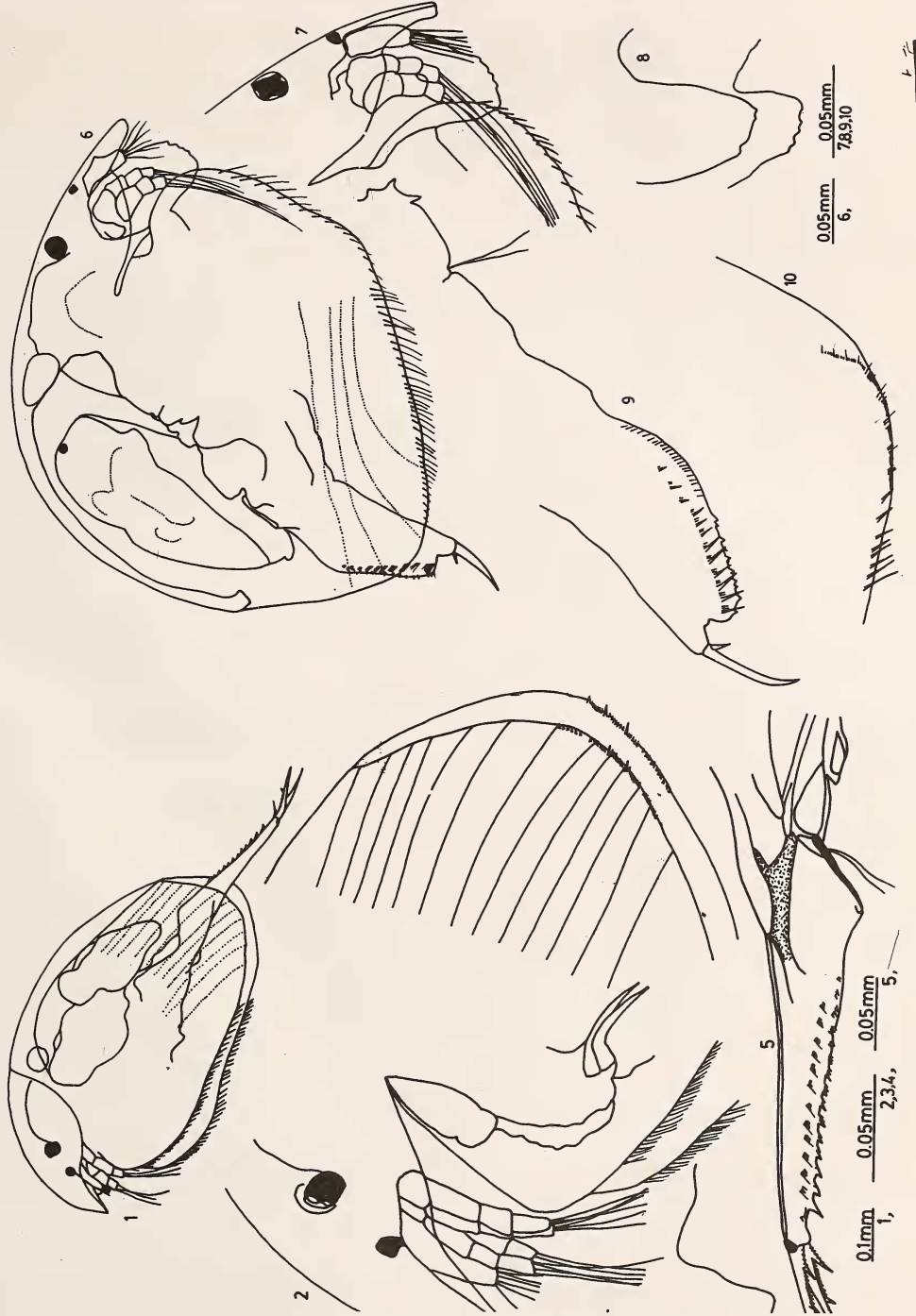
**Camptocercus** cf. **australis** Sars, 1896 (Figs. 1-5)

**Morphological features:** Female; size 0.62-0.73 mm. Body oval; maximum height slightly before middle of the body (Fig. 1). Valve with longitudinal line. Posteroventral corner of valves rounded; posterior margin slightly convex with a series of setae. Head keel present, dorsal margin of head and dorsal side of valve forming a smooth curve (Fig. 2). Ocellus smaller than eye. Posteroventral

corner rounded with three small denticles, attached submarginally between the series of fine setules and slightly projecting beyond the margin of the valves (Fig. 4). Rostrum pointed and directed anteriorly. Antennules not reaching the apex of rostrum. Setae on antenna are 0-0.3/0-1.3. Plate of labrum with rounded apex (Fig. 3). Head shield with three pores. Post-abdomen long and narrow, with 15-18 anal denticles, lateral setae being small in a group (Fig. 5). Claw long, slightly curved dorsally and pointed dorsally. Basal spine about one fourth the length of claw, pointed on the proximal surface. Intestine forms loops with caecum.

**Distribution:** Very rare. Collected in Ghana canal of Keoladeo National Park and Ajan Bund reservoir of Bharatpur. Elsewhere — Australia (Henry 1922), China (Sieh-chih and Nan-shan 1979) and Malaysia (Idris 1983).

This is the first record of the species in India. However, Gurney (1907) reported this species from Chakradharpur without any illustration or details of characters to ascertain its validity. The present material differs slightly from *C. australis* by the presence of submarginal denticles on the posteroventral corner of the valves. Other species of



Figs. 1-5. *Camptocercus cf. australis* female. 1. Lateral view, 2. Detail of head, 3. Labrum, 4. Posteroventral corner, 5. Postabdomen.  
Figs. 6-10. *Indiatolona globulosa* female. 6. Lateral view, 7. Detail of head, 8. Labrum, 9. Postabdomen, 10. Posteroventral corner.

this genus have large marginal denticles which differentiate this species from the rest. However, recent studies on the species from Malaysian rice fields (Idris 1983) and also the present study clearly show that this species also has marginal denticles, which were not reported earlier.

Genus *Indialona* Petkovski, 1966

*Indialona globulosa* (Daday, 1898) (Figs. 6-10)

**Morphological features:** Female size 0.35-0.42 mm. Body oval, highly arched dorsally, minimum height before middle (Fig. 6). Posteroventral corner of valves distinct without denticles (Fig. 10). Valves with distinct longitudinal striations. Ventral margin convex with setae turned inward. Ocellus smaller than eye, situated nearer to the eye than to apex of rostrum. Rostrum blunt, antennules reaching about three fourths the length of rostrum (Fig. 7). Plate of labrum convex anteriorly and slightly serrated on antero-ventral margin (Fig. 8) Post-abdomen broadest near anus, with distinct preanal corner. Anal groove concave, post-anal margin slightly tapering distally with rounded

dorsal-distal corner. Dorsal margin with 11-13 short denticles. About 13 groups of long and distinct lateral spinules present laterally, the distal most ones being the largest and slightly projecting beyond the dorsal margin (Fig. 9). Claw long and setulated on the concave surface, with a basal spine.

**Distribution:** Not common. Collected in very small numbers in the marshy habitats of Keoladeo National Park. Elsewhere — Philippines (Mamaril and Fernando 1978) Sri Lanka (Rajapaksa and Fernando 1983) and Malaysia (Idris 1983).

This is the first record of the species in Rajasthan. It was reported earlier from West Bengal (Sharma 1978). The present material agrees well with the description of the species made by Smirnov (1974), Idris (1983) and Michael and Sharma (1988).

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## 32. RECORD OF THE CONE SHELL *CONUS CUMINGII* (REEVE, 1848) FROM BOMBAY SEAS

Literature on the shells of India is scant and very old. Many of the species mentioned have become rare due to environmental changes and pollution. Crichton (1941), Gravely (1942) and Hornell (1949) described the molluscan fauna of

Madras and Indian coast. Literature on shells of Bombay by Subrahmanyam *et al.* (1952) state that there are in all 187 species of Gastropods. But many of these have become very rare. For example, *Lambis lambis* (Linn.) and *Xancus pyrum* (Linn.) have